ABSTRACT OF THE DISCLOSURE

The invention provides a computer system for realtime control of machines. The computer system continually switches between a realtime programs EP providing control of peripheral devices A_1, A_n, including control and/or regulation, and other programs within the realtime clock periods. The computer system has communications system KS and a a control system SS connected to the peripheral devices A_1, A_n, particularly motor driver devices, over the communications system KS. A realtime clock signal T is generated from an independent cyclic communications clock T2 of the communications system KS, which has a communications processor KP that operates in realtime. When the control processor SP is remote from the communications processor KP, the realtime clock T may be regenerated an incoming bus clock signal B by a counter Z having upper and lower thresholds K2 and K1.